

# **Atrium at Sumner**

The StoTherm<sup>®</sup> ci system helps the New York City Housing Authority incorporate Passive House energy efficiency standards.



 $\cdot$ 

NYCHA uses StoTherm ci with 4" EPS insulation to achieve high energy efficiency standards in its new senior housing building.

Sto Products	StoTherm ci
Applicator	Sessa Plastering
Architect	Studio Libeskind
Distributor	Sto Eastern
Media Contact	Schoeny Jones: sjones@stocorp.com Julie Chalpan: julie@focusunlimitedpr.com

The Atrium at Sumner is a new affordable senior housing development constructed as part of the NextGeneration NYCHA (New York City Housing Authority) initiative, which aims, among other things, to (re)build, expand, and preserve public and affordable housing stock. Constructed on underutilized land on NYCHA's Sumner Houses campus, this iconic 11-story building has 132,418 square feet of affordable senior housing and a ground-level community facility of 8,309 square feet along Marcus Garvey Boulevard. The Atrium at Sumner was designed to be different and make a difference, starting with building performance

#### Built to the Highest Energy Standards in the World

NextGeneration NYCHA is proactive about creating sustainable carbon-neutral housing. Recognizing the inefficiencies of older buildings under their management, which often have little to no insulation, the initiative set out to construct the Atrium at Sumner not just to high standards, but to the highest energy standards globally – Passive House standards.

Passive House is the world's leading standard in energy-efficient construction. The Atrium at Sumner meets many of these standards, including airtightness requirements of the envelope and a minimum R-value on the exterior insulation, through its significant green and energy-efficient features, which included 4" EPS insulation. These standards will result in 60 to 70 percent less energy consumption for the Atrium at Sumner than the average New York City apartment building. The physical design of the building also plays a role in energy savings.

### "Growing up in social housing in the Bronx gave me a unique perspective on the importance of community and high-quality, affordable housing."

Daniel Libeskind | Principal Design Architect | Studio Libeskind

#### World-Class Design from a World-Class Architect

The NYCHA chose Studio Libeskind for the project, an international architecture firm headquartered in New York City. As noted on the Studio's website states, "We believe that bold design must be realized with sustainable technology," a philosophy that aligned perfectly with NYCHA's goals.

Studio Libeskind wanted to create a space that bolstered the residents' quality of life. The design features a dynamic yet rational geometric form, punctuated by a pattern of open and solid elements. The design team aimed to interact actively with the street and the surrounding context. Bold diagonal lines wrap the building at angles that rise from the ground, creating a folding form that breaks down street-level massing. A glazed entrance lobby creates a transparent and open connection to the street. The residential facility is a courtyard building with corridors facing inward toward a central green public space on the second floor.





"Growing up in social housing in the Bronx gave me a unique perspective on the importance of community and high-quality, affordable housing. I took this insight to task when designing the Atrium at Sumner Houses; I wanted to create a place that felt like home to the residents," said Principal Design Architect Daniel Libeskind, Studio Libeskind. "I hope this project serves as a powerful example of how good design can positively impact society, especially for those in need," added Libeskind.

To make this incredible vision a reality while meeting the energy efficiency standards required by the NYCHA, Studio Libeskind collaborated with many partners, including Sto Corp., the world's leading innovator in claddings, air barriers, coatings, and restoration systems.

#### A Collaborative Process with a Beautiful Result

At the start of the project, Dan Canova, Sto Sr. Construction Design Manager, reviewed the project details and challenges with Studio Libeskind. Ultimately, it became clear that the StoTherm ci system with a StoSignature<sup>®</sup> Stone 10 Limestone finish was the ideal choice, providing the project with a smooth natural limestone look.

"We are pleased with the Sto products. The EIFS System is a cost-efficient choice for versatile, high-performance exterior cladding that is compliant with contemporary building and energy codes."

Daniel Libeskind | Principal Design Architect | Studio Libeskind

StoTherm ci is a high-performance, energy-efficient EIFS with Drainage continuous insulation wall system that integrates StoGuard<sup>®</sup> air and water-resistive barrier, EPS insulation, and drainage. In other words, it has the five planes of control needed for protecting a building and creating energy-efficient, durable, safe, and sustainable buildings built into the system. The five planes of control are:

- Vapor Control Layer—layer to control the flow of water vapor from areas of high to low pressure, minimizing condensation; vapor is permeable or impermeable per designer specification.
- Air Control Layer—layer to limit the uncontrolled airflow through the wall assembly, reducing condensation and energy loss.
- Water Penetration Control Layer—barrier inbound of the cladding, flashed to the exterior, designed and installed to prevent liquid water from entering the wall cavity.
- Thermal Control Layer—insulation to significantly reduce thermal bridging.
- **Durable Water-Shedding Layer**—functional finish surfaces connected to a resilient lamina to protect and divert water away from the wall.

"We are pleased with the Sto products. The EIFS System is a cost-efficient choice for versatile, high-performance exterior cladding that is compliant with contemporary building and energy codes," noted Daniel Libeskind.







#### The Bold Design Presents Challenges

The Atrium at Sumner is not your typical, bland square building. Studio Libeskind integrated stunning angles so windows would capture more sunlight in winter and allow it to cascade over them in summer. As part of this dramatic design, the windowsills are set back into the façade, which could have made applying the basecoats and finishes painstaking for Sessa Plastering, the project's applicator.

Fortunately, booms and hanging scaffolding helped crews access the hard-to-reach areas. But they needed a solution for the flat ledges created by some of the angles. These flat surfaces can lead to water intrusion issues and costly repairs if not treated properly. Fortunately, Sto also had a proven solution for these areas: Sto Flexyl.

## "It is a truly remarkable feeling to have come together to create nearly 200 new affordable housing units on NYCHA property for New Yorkers in need."

Lisa Bova-Hiatt | Chief Executive Officet | NYCHA

Sto Flexyl is an acrylic-based, fiber-reinforced, flexible adhesive and waterproofing basecoat for use on prepared concrete, masonry, plaster, gypsum, and cement sheathing surfaces. Sto Flexyl was applied on all windowsills. The applicator had to build up the basecoat to create a slope away from the building, and once it had dried, they troweled on the smooth finish, just as the architect had envisioned.

"I use Sto products a lot. They are great products! And Sto Flexyl was perfect for this application," said Nino Sessa of Sessa Plastering.

#### Good for the Planet, Great for New York

Construction on the Atrium at Sumner finished in May 2024. The new building features 190 apartments—132 units available to senior households earning below or equivalent to 50 percent of the Area Median Income (AMI), 57 units reserved for seniors who had formerly experienced homelessness, and one designated for a live-in superintendent. NYCHA residents will be given preference for 33 of the apartments.

"It is a truly remarkable feeling to have come together to create nearly 200 new affordable housing units on NYCHA property for New Yorkers in need," said NYCHA Chief Executive Officer Lisa Bova-Hiatt. "This new, beautiful building will be home to a thriving senior community and provide a new quality of life to formerly unhoused members of the community. We are deeply appreciative of our partners in this endeavor to provide the Atrium at Sumner's residents with the comprehensive care and exceptional level of comfort that they deserve in their golden years."







# The Confidence to Follow Your Vision

Inspiration favors the open mind. Sto allows your creative exploration to take you anywhere. Our proven products give you the unmatched freedom and ability to achieve your vision in any color, any form, any texture and any material.

Combining innovative design and high-level performance, StoTherm ci offers a unique approach to wall system installation. These fully engineered systems provide unmatched versatility with an array of design options that include unique textures, colors, shapes, and materials to suit any creative vision. With StoTherm ci, you get innovative products, forward-thinking design, and durable performance that surpasses your expectations. Rest assured, Sto is there wherever your inspiration leads.

Creativity Begins. Sto Finishes.®



#### **Sto Americas**

**Sto Corp.** 3800 Camp Creek Pkwy Building 1400, Suite 120 Atlanta, GA 30331 USA

Phone 1-800-221-2397 www.stocorp.com